

Burner with porous burner insert

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Abstract of DE19904489

The burner insert (7) has a core (8) with a porosity, the Peclet factor of which is sub-critical and the outer cover (9) of the burner insert (7) has a porosity, the Peclet factor of which is super-critical. The housing (2) of the burner (1) has a gas - air mixture inlet which issues into the mixture chamber (4) limited by a flame trap (5) formed by a layer of ceramic balls, preventing a backflow of the flame into the mixture chamber. A heat exchanger chamber (11) containing a heat exchanger (12) connects to the burner insert (7). This chamber, in addition to the heat exchanger, can be filled with a porous material, eg. ceramic balls. It is limited by a flue gas chamber (13), provided with a flue gas outlet (14).